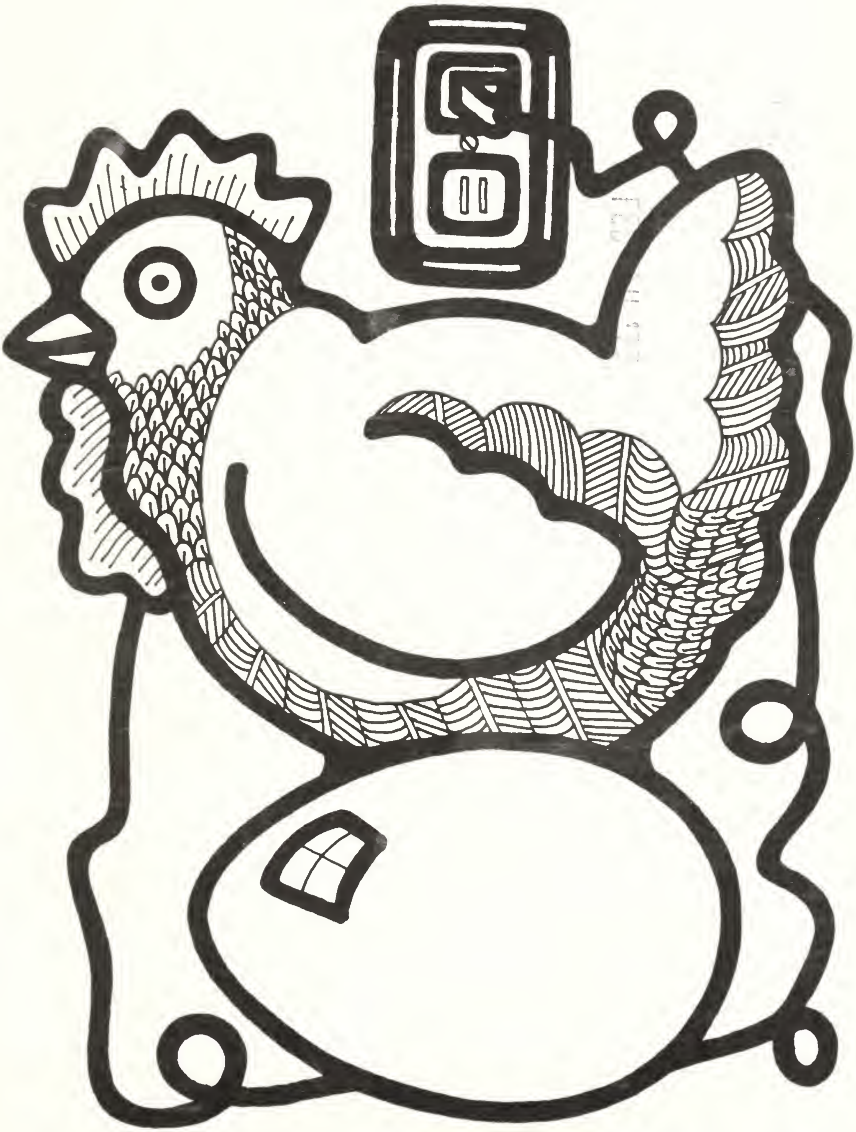
agricultural situation

THE CROP REPORTERS MAGAZINE ● JANUARY-FEBRUARY 1977
U.S. DEPARTMENT OF AGRICULTURE ● STATISTICAL REPORTING SERVICE



POULTRY, POWER & POTENTIAL SAVINGS

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When it comes to conserving energy, the U.S. poultry and egg industry claims a pretty good track record. But, say USDA economists, there's room for improvement.

In 1974, American poultry producers, processors, wholesalers, and retailers used over 146 trillion Btu in natural gas, petroleum, electricity, propane, and other energy, for a total cost of $550 million.

On the farm side, the producers' energy bill came to $126 million—or roughly 2 percent of their gross farm income from poultry and eggs. Their bills for propane, electricity, and gasoline alone came to 1.9 cents for every live broiler, 15 cents for each turkey, and 11 cents per laying hen.

Brooding accounted for over 70 percent of the energy used in poultry production, lighting and ventilation claimed 11 percent, and waste handling, hauling, and operating feeding equipment accounted for almost 18 percent.

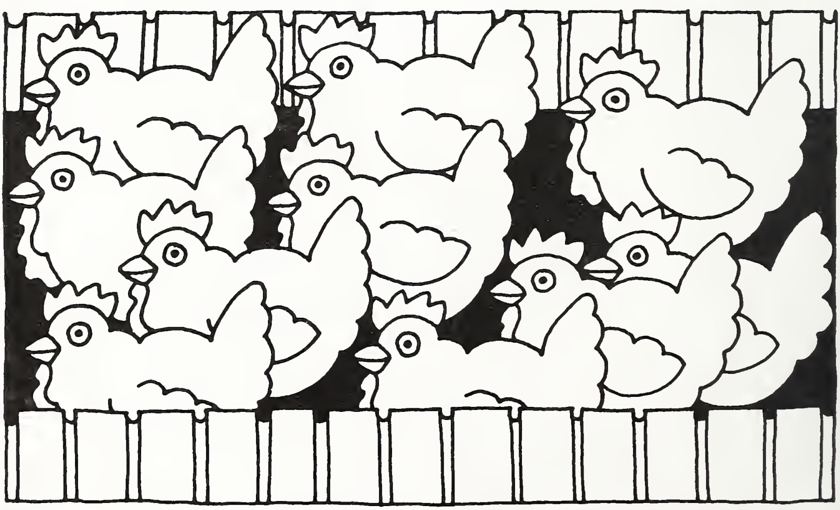
On the bright side, energy use per head has fallen off since the mid-1960's, as more efficient use of heating fuels, particularly for broilers, has offset larger electricity needs, especially for layers and turkeys.

However, economists say that individual producers can still cut their energy use—and bills—by 20 to 50 percent.

The economists claim that, in the short run, saving energy is simply a matter of paying attention to details and making minor adjustments to existing practices. Also keeping good energy use records will help spot trouble areas and check for savings when adjustments are made.

Among actual production operations, brooding requires vast amounts of energy to heat poultry houses. But producers can hold the line on heating costs by following a few simple guidelines such as locating brooders in the center of houses, using solid brooder guards like sheet metal or corrugated paper, clustering brooders in groups of three or four, and by following manufacturers' suggested maintenance on all brooding equipment.

Partial house brooding, where a



plastic curtain closes off a section of the poultry house for young chicks, can mean an energy savings of up to 25 percent. Installing winterized side curtains on poultry houses can trim fuel use 10 to 15 percent. It also helps to shut off brooder pilot lights as the birds grow older and require less supplemental heat.

Poultry house lighting offers another chance to conserve. A system of intermittent lighting such as 8 hours of light, followed by 10 hours of dark, 2 hours of light, and 4 hours of dark (compared with the traditional 14 hours of light and 10 hours of dark) can shave electricity use by 25 percent.

Producers can also burn 25 to 50 percent less electricity by reducing light intensity. Keeping light bulbs clean and adding reflectors will provide maximum light at minimum wattage.

An efficient ventilating system is also a must. Lowering ventilation rates will save power and still do the job, since many poultry houses are currently overventilated. Local Extension Service engineers should be able to help determine proper ventilation schedules.

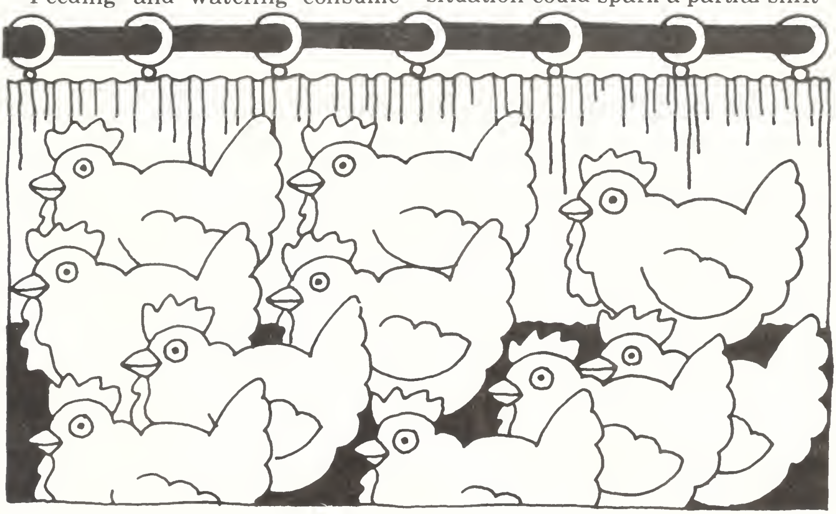
Feeding and watering consume only small amounts of energy, but require even less when producers reduce the number of feeding cycles on mechanized equipment and keep all feeding and watering fixtures in good working condition.

Building a new poultry house or making some changes on the old one? Then's the time to act on long-range energy considerations. Insulation, ventilation, and all other systems should be designed with the realization that future fuel shortages could sharply curtail energy supplies.

Selecting the proper building and insulating materials is crucial. And while it costs plenty to add insulation to existing buildings, economists say that at current prices, an insulated poultry house ceiling will more than pay for itself in fuel savings within 10 years.

Maintence is the key once the house is built or remodeled. This includes periodic checks for holes in side curtains, air leaks around doors and windows, dampness or shifting of insulation, and leaks in walls and ceilings. . .all big energy wasters.

Further down the road, a continuing or worsening energy situation could spark a partial shift



away from conventional energy sources. Already, there are a number of alternate sources which can be used with present technology. But generally these haven't been developed to their full potential because of excessively high installation costs and the previously low price of fossil fuels.

Solar energy—abundant, renewable, and nonpolluting—is one of these sources. However, the collection and use of solar power remains far more expensive than conventional energies like natural gas, propane, and fuel oils.

For example, a solar system providing about two-thirds of the heating for a broiler house would cost around $33,000. To become economically competitive with propane within 3 to 4 years of operation, the initial cost of the system would have to drop 85 percent.

Methane gas, another potential, also requires hefty equipment outlays. On top of that, the gas is asphyxiating and highly combustible, which means that equipment requires daily attention and must be kept in top condition. And while the anaerobic process which produces methane gas is technologically possible, it's not yet practical for large-scale use.

Heat pumps, which recover heat from ventilation systems and cycle it back through the poultry house, can significantly cut fuel use. Experts say that with some improvements and alterations, heat pumps could be economically practical in the near future. The pumps boast another advantage: They can be used for cooling during summer.

Windmills, a traditional energy source, stand as another possibility. Right now, scientists are studying wind energy to power electric generators to drive mechanized equipment and supply electric lighting.

However, many geographic areas lack a constant wind supply, and storage of electrical energy is limited and expensive. Like solar energy and methane gas, initial costs remain prohibitive, and it will take extremely high fossil fuel costs or less costly, mass-produced systems to make windmills a practical source of energy in the near future.

FARM LABOR—HAWAIIAN STYLE

If the high cost of Hawaiian living weren't a factor, wages for hired farmworkers in the Aloha State would look mighty attractive compared with those in the rest of the United States.

That comparison, shown in detail below, comes from SRS's quarterly Farm Labor report released last November, which, for the first time, contained estimates for Hawaii.

Data were collected during the week of October 10-16, from interviews with employers whose names were randomly selected from lists of farm operators, or whose farms were located within a sample of randomly selected land segments.

The October survey marked the first time that SRS used a combination of lists and land units to gather agricultural data in Hawaii. Previous surveys of the islands' farm labor force were taken only from lists of employers. Using the two sources together provides a more complete estimate.

Roughly 25 enumerators, who had been specially hired and trained for the new farm labor survey, interviewed employers on all the major islands with agricultural production. Estimates of the number of Hawaiian farm laborers and the wages they earn will appear in each issue of the Farm Labor report, which is released in February, May, August, and November.

Enumerators found 15,500 workers employed on Hawaiian farms and plantations during the October 10-16, 1976, survey week. Farm operators and unpaid family members working 15 hours or more during the week accounted for 4,500 of the total.

Hired farm laborers numbered around 11,000 and more than half worked directly in the production of sugarcane, pineapple, papaya and other fruit, cut flowers, coffee, cattle, and other livestock.

Wages for all types of Hawaiian farmworkers averaged out to an hourly rate of $4.48. For the rest of the United States, the figure came out considerably lower at $2.80. Hawaiian field and livestock workers averaged $3.89 an hour, versus $2.60 for their mainland counterparts. Most Hawaiian laborers received cash wages only and no perquisites.

HAWAIIAN AND AVERAGE MAINLAND U.S. FARM WAGE RATES: HOW THEY STACK UP

Hawaii		Mainland United States
$ per hour		*$ per hour*
4.48	All hired farmworkers	2.80
	Method of pay	
4.48	Paid by other than piece-rate	2.75
4.34	Paid by hour only	2.74
4.29	Paid by hour cash wages only	2.81
	Type of work performed	
3.89	Field and livestock	2.60
4.69	Machine operators	2.79
5.01	Maintenance and bookkeeping	3.42
6.09	Supervisors	4.47

THROUGH PORTS ON THE PACIFIC

During 1972-73, recordbreaking U.S. grain exports made nationwide headlines—and so did the ensuing transportation tie-ups to and through Gulf Coast ports.

Seeking to avoid massive rail and ship bottlenecks in the future, a House Subcommittee, meeting during the summer of 1974, recommended that we ease the burden on Gulf Coast outlets by shipping more grain through ports along the West Coast.

Committee investigators determined that grain elevators on the West Coast were not operating at full capacity. In 1975, for example, more than two-thirds of all U.S. grain and soybean exports moved through Gulf Coast facilities, while Pacific ports handled only 11 percent.

The committee noted that since such a large share of our grain exports are destined for Japan and the Far East, it would appear to make sense to load them at sites along the Pacific Coast, which, compared with Gulf Coast ports, sit 4,000 to 5,000 miles closer to Japan.

With this as background, USDA economists, cooperating with researchers from private industry, who developed a simulation model of West Coast port operations for the U.S. Dept. of Commerce's Maritime Administration, explored the possible consequences of stepping up grain and soybean exports through 15 elevators at 11 West Coast ports.

Commodities considered in the study included wheat, corn, soybeans, and sorghum, which were assumed to arrive at West Coast elevators by covered hopper cars, rail boxcars, trucks, or barges. Researchers considered the impact three possible situations would have on the flow of U.S. grains and soybeans through these elevators:

1) 20 percent more volume than in 1975, with elevators operating the normal 8 hours a day;

2) 50 percent more volume with elevators working the same hours; and

3) 50 percent more volume with elevators working 16 hours daily.

Researchers compared results from the three alternatives with actual operations in 1975, when 350 million bushels of grain moved through West Coast ports. That year, no grain was left waiting at elevators, which were assumed to have 24½ million bushels in storage. The grain was loaded on 1,091 ships, with an estimated 95 empty vessels detained at anchorage. Average delays worked out to a low 4.6 hours per ship.

Results from the three simulations revealed ample capacity for stepping up exports of grain and soybeans through West Coast ports. . .

A 20-percent increase (the first alternative) would produce nominal congestion with the average amount of grain waiting at elevators rising slightly—from nothing in 1975. Roughly 242 ships would be detained at anchorage, with an average waiting time of 17 hours.

With 50 pecent more volume, but no hike in working hours, the average amount of grain queued at elevators would climb by only 1.4 million bushels, or less than 3 percent of present elevator working capacity. This congestion would produce only modest tie-ups in inland transportation systems.

On the shipping side, there would be 549 ships held up at anchorage during the year, with waiting time averaging 44 hours.

Longer elevator operating hours (alternative 3) would ease this congestion. Doubling the working day to 16 hours would prevent grain from piling up at elevators, even with a 50-percent bigger flow. Since more grain would be loaded daily, the total number of ships delayed at anchor would drop sharply, with average wait-time trimmed to around 3 hours.

For comparison, a study of the Gulf area indicated that a 50-percent increase in grain and ships would cause considerable congestion, with grain queued at elevators mounting to a third of storage capacity. Average waiting time for ships would climb to around 90 hours.

Even stepping up elevator work schedules to 16 hours would only cut anchorage time and elevator waiting time by two-fifths.

But while the Pacific ports have ample capacity to ease some of this burden, other factors should be considered. This study, for example, confined itself to the interaction of vessel, harbor, and port facilities, and did not examine the time and cost of moving grain to the alternative ports by inland transportation. Nor did it consider total ocean shipping costs from the various ports.

A RECORD SPREAD

Fertilizer manufacturers had something to cheer about last year as farmers in the United States and Puerto Rico spread a record amount during the year ended June 30, 1976.

According to SRS's Crop Reporting Board, total use reached 48.9 million tons, 15 percent more than a year earlier and 4 percent over the previous record in fiscal year 1974.

Top three users were California, with 4.2 million tons—up 7 percent from 1974/75; Illinois, just under 4 million tons—up 16 percent; and Iowa, 3.7 million tons—up 22 percent.

For the first time, application of primary nutrient materials (nitrogen, phosphate, potash) accounted for a bigger share of total use than mixed fertilizers.

BRAZIL'S GOT THE JUICE

It took a Florida frost to launch Brazil's orange juice industry, but now that country ranks as the world's top exporter of orange juice concentrate.

The killing frost struck in 1963, sending buyers and sellers scurrying elsewhere to fill the gap. Brazil, which already boasted a sizable citrus industry, seemed a "natural," since it also had ample room for expansion. Quick infusions of money and technology and a rapid building of processing facilities soon put Brazil on a competitive level with the United States.

Despite early problems with juice quality and a market glut in 1965, the country's citrus juice exports quickly shot from only 1,500 tons in 1963 to over 30,000 in 1968. That same year, Brazil emerged as the world's biggest supplier of concentrated orange juice, leaving the United States a distant second.

Major buyers include the Netherlands, West Germany, Canada, and even the United States, which bought some 21,000 tons in 1975. Between 1974 and 1975, Brazil's juice exports soared 67 percent to nearly 181,000 metric tons valued at $82 million. Experts say the 1976 total could go as high as 225,000 tons.

This all adds up to some very stiff competition for U.S. growers, who, in 1975, shipped only about a third as much concentrate as Brazil. On top of that, Brazil's product goes a lot further because it's more concentrated, taking five parts of water to reconstitute, versus three parts for U.S. juice.

So far, Brazilian growers have boosted their output mostly by planting more acres. Yields have remained at around 1.6 to 1.8 boxes per tree in recent years—about half the Florida figure. But faced with rising land and labor costs, producers will probably step up efforts to improve yields.

Meantime, growers will continue to enjoy a climate that allows commercial production within 4 years after planting, compared with 5 years in most of the United States.

PESTICIDES: PLENTY FOR '77

Farmers should have few worries about pesticide supplies this year. USDA economists forecast ample amounts with minimal price increases.

Last year, pesticide production climbed 10 to 15 percent, and together with increased inventories, proved more than adequate to meet stepped-up use. If acres planted in 1977 hold near last year's mark, producers will probably apply roughly the same amount of insecticides and fungicides as in 1976. Herbicide use, however, should advance some due to a general trend toward heavier use of weed killers.

Economists reported that at the end of the 1976 crop season, pesticide inventories stood above year-earlier levels. Manufacturers added about 20 percent to overall pesticide capacity for use in 1976, and for use this year, they added another 20 percent for herbicides and 5 percent for insecticides.

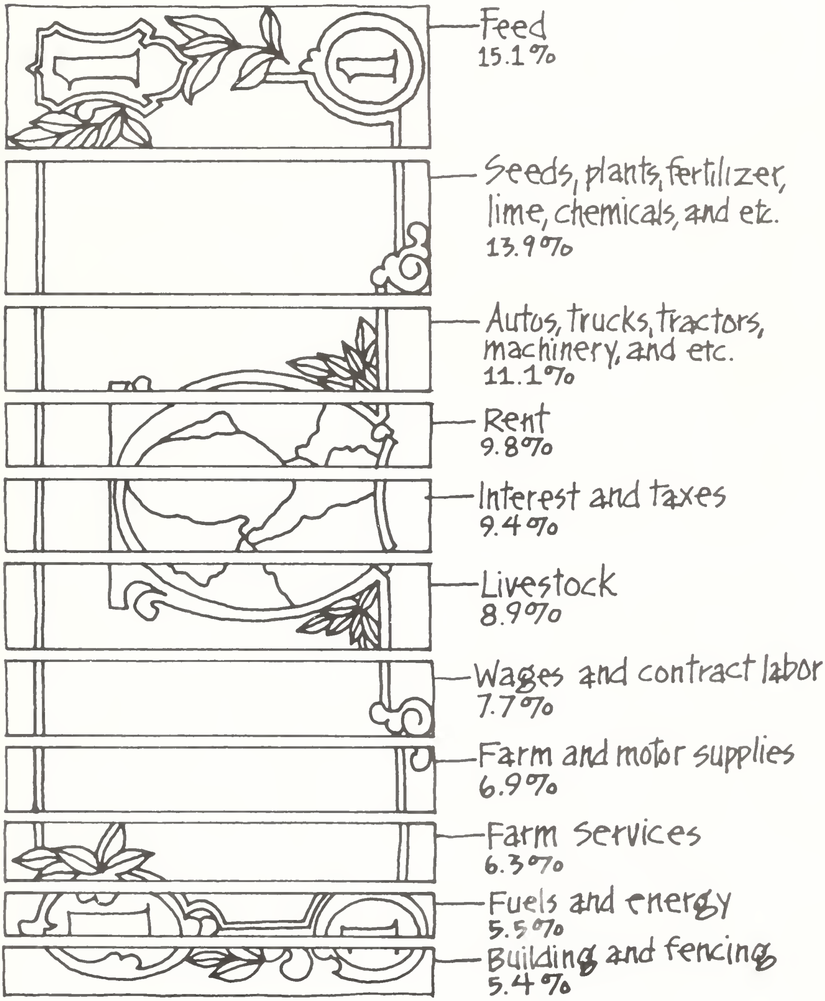
Regulatory actions play an increasing role in determining the amount of pesticides that will be available and used by the Nation's farmers. These actions are largely taken under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act Amended, which is scheduled to be fully implemented by October 1977. Among other features, it will require all private and commercial applicators to be certified, and specify that pesticides registered before 1972 must be registered again.

THE PRICE OF PRODUCING...

U.S. farmers spent $81.8 billion for production goods and services during 1975, 4 percent less than a year earlier, according to survey findings recently released by SRS. Average expenditures per farm worked out to $29,172, down from $30,167 in 1974.

The biggest outlay went for feed, which claimed $12.3 billion, or just over 15 percent of all expenditures. Seeds and plants, fertilizer, lime and soil conditioners, and agricultural chemicals cost producers $11.4 billion.

While they made up only about 4 percent of all farms in the United States, farms and ranches with sales of $100,000 or more accounted for nearly 46 percent of all farm production expenditures in 1975. Average outlay per farm on the big operations came to $229,000, compared with $62,800 on farms in the next largest group (sales from $40,000 to $99,999).



SURVEYSCOPE

To give our readers a clearer picture of the vast scope of SRS activities, Agricultural Situation presents a series of articles on special surveys undertaken in various States. While these are not national surveys, they are important to the agriculture in individual States.

"Missouri ranks second in the United States in number of farms. Keeping an up-to-date list of these 139,000 farms forms an extremely important part of our job," says Donald M. Bay, Missouri Agricultural Statistician.

"Before taking a crop or livestock survey, we have to choose a sample of farms from a list of all State farm operators. For the sample to be reliable, the list must be accurate, up to date, and as complete as possible." Bay says about 20 percent of the list changes each year due to farm sales, deaths, and other reasons.

"It's impossible to keep in continuous contact with each farm operator," Bay claims, "but we make every effort to keep the list current by updating sections of it each year and by making day-to-day changes reported to our office."

Increased interest by Missouri farmers and other data users in reliable crop and livestock reports necessitated a complete update of the list in 1976. "Because the list had been built up over the past several years from various sources," Bay notes, "we felt it necessary to go directly to farmers to get more current

Surveys returned by a majority of farmers helped the Missouri office completely update. . .

information on the size and type of their crop and livestock operations."

The Missouri office mailed a Farm and Livestock Inquiry to all known farms across the State. Nearly 60 percent of the questionnaires were returned, a rate considered excellent on a voluntary mail survey.

Several key problems arose when farmers began returning questionnaires. "Names on our list must represent the actual farming operation," explains Bay. "We define a farm operator as the person who is responsible for day-to-day decisions. Therefore, when land is rented or worked on shares, the renter or tenant—not the landowner—is considered the operator."

Partnerships and corporation arrangements caused added problems. For example, a farm operator may own a tract of land by himself, rent land in a corporation, or operate in a partnership. Each of these different types of operating arrangements must be represented on the list.

One farming operation may go by several names—like the ABC ranch operated by Albert B. Corn—and be listed under both names. Duplications on the list cause errors when names are randomly selected for agricultural surveys since the same farm has twice the chance to be selected.

In many cases, there are similarities among names of operators in one community. This usually happens when a family and its kin settle in one area. Before the update was complete, Bay's office made well over 1,000 phone calls to straighten out duplications, partnership arrangements, and other problems that surfaced during review of the list.

What does all this mean to the Missouri farmer? "Being on our list of farm operators doesn't necessarily mean you will be chosen for a survey," explains Bay. "But a successfully updated list of farm operators ultimately means more reliable crop and livestock information for Missouri producers."

. . .its list of the State's 139,000 farms—a list that changes nearly 20 percent a year.

Briefings

RECENT REPORTS BY USDA OF ECONOMIC, MARKETING, AND RESEARCH DEVELOPMENTS AFFECTING FARMERS.

SWEETER SIRUP PRICES. . .During 1976, the Nation's maple sirup producers earned roughly 67¢ more per gallon than a year earlier, as prices received by farmers in 9 major producing States averaged $11.48. According to SRS's Crop Reporting Board, prices rose or remained unchanged in all States except Pennsylvania, where a gallon of maple sirup brought producers $10.60 in 1976—down 50¢ from the year before. Wisconsin producers, on the other hand, realized an increase of over $3 a gallon, as prices shot from $9.80 to $12.90.

A MODEST GAIN. . .Sheep and lambs on feed in the 7 major feeding States numbered 1,147,000 on November 1, 1976, up 3% from a year earlier, but off 11% from the November 1974 mark. While last November's tally showed the first gain over the previous year since 1971, it proved to be the second lowest total since SRS began making its seven-State estimates in 1960. Six of the seven States registered increases from a year earlier, ranging from 6% in California and Iowa to 14% in South Dakota. Texas showed a 24% decline.

STORED ENERGY. . .Scientists at Texas A&M University, under a 1-year grant from USDA's Agricultural Research Service, will develop a solar storage system for drying rice. The system will supply heated air during the night and at other times when the surrounding air isn't suitable for drying. The storage and recovery of solar heat will mean less demand for liquid petroleum and natural gas needed for supplemental heat in the drying process.

PLENTY OF POULTRY. . .Preliminary estimates by USDA's Foreign Agricultural Service (FAS) put world poultry meat output in major producing countries in 1976 at 15.7 million metric tons, up 6% from a year earlier. Broiler production, which makes up around two-thirds of all poultry produced in countries surveyed by FAS, was expected to rise 8% to 10.4 million tons. Turkey meat, which accounts for a tenth of total production, was forecast up 11%.

WHAT ARE YOU EATING?. . .This April, USDA will begin a 1-year nationwide food consumption survey, which promises to be the most comprehensive ever taken. Data collectors will visit 15,000 households to check the kinds and amounts of food used by families and individuals. The survey will include two supplemental data collections—one in Hawaii, Alaska, and Puerto Rico, and the other in 5,000 households where elderly people live. This will be the country's sixth nationwide food consumption survey; the last was taken in 1965/66. Data from these surveys find use in nutrition and education programs and form the main statistical source for developing national food and nutrition policy.

LEATHER THAT CAN TAKE IT. . .USDA scientists have come up with a new process for making leather that can withstand conventional drycleaning. Until now, most leather garments had to be sent to special cleaning facilities, which in turn meant extra time and expense. Called PolyRetan, the new process unites chemicals with leather at the molecular level, rather than simply coating, mixing, or impregnating. This creates an essentially new leather fabric that resists drycleaning solvents. The new PolyRetan leather also boasts improved strength and stretchability, and resistance to mildew.

FARM LABOR COUNT. . .SRS's Crop Reporting Board estimates there were 4% fewer farmworkers on U.S. farms last October than a year earlier. During the survey week of October 10-16, the total farm workforce numbered about 4.3 million. Farm operators and unpaid family members working 15 hours or more were estimated at 2,960,400, with hired workers rounding out the total at 1,340,000. Field and livestock workers made up roughly 63% of all hired laborers. Farm operators averaged 39.1 hours of work during the survey week, the same as hired laborers, while unpaid family members put in 36.1 hours.

CAR PRICES. . .Farmers had to shell out considerably more in 1976 for both new and used cars and trucks, according to an SRS survey last November 15. Buyers opting for a 4-door medium priced, standard size car paid roughly $6,280, or $510 more than the year before. A new intermediate size 4-door sedan cost producers an average of $5,480, compared with $5,080 the previous November. Price increases were just as hefty for trucks, with a 3/4-ton pickup going for $500 more, and a 2-ton truck, selling for $8,810, a gain of over $1,200. Meantime, the average used car cost producers $1,890 last November, a $320 leap from a year earlier. Increases ranged about the same for used trucks, with farmers paying around $2,050 for a used 3/4-ton pickup and $2,590 for previously owned 1½ to 2-ton trucks.

WATCHING IT. . .U.S. consumers have become more budget conscious when they shop for food, reports USDA's Economic Research Service. A survey of 1,400 households during the spring of 1976 asked consumers to compare their food buying habits with those of a year earlier. About 30% of the respondents who buy the most food for their households reported they had begun checking newspapers more frequently for "specials," using more coupons, and buying food in volume more. At least a tenth said they made fewer trips to food stores, mainly to save gas.

NEW USE FOR SEDIMENT. . .Can sediment dredged from rivers and lakes boost crop production? That's what scientists with USDA's Agricultural Research Service and the University of Minnesota expect to find out. Under a 30-month project funded by the U.S. Army Corps of Engineers, researchers will work with samples taken from 10 dredging sites in the East and Midwest. Plant growth studies will be made in greenhouses, using the sediment samples, as well as soil samples from nearby areas, and combinations of the two.

WIND AND WATER. . .Scientists at West Texas State University, cooperating with USDA's Agricultural Research Service, are examining the use of wind to pump irrigation water. The study forms part of an overall effort by the Energy Research and Development Administration to develop wind energy. The scientists will develop a mathematical model of wind-powered irrigation pumping systems based on the performance of an actual pumping arrangement, and determine if the wind-driven systems are economically practical compared with those using present energy sources.

WHERE THE WHEAT WENT. . .India—not the USSR—proved the biggest market for U.S. wheat during 1975/76. The United States provided 74% of all India's grain imports, shipping 4.8 million tons of wheat (4.1 million tons under cash purchase and 711,200 tons under Title I, PL-480) and 622,400 tons of sorghum. The Soviet Union ranked as the second largest U.S. wheat market, followed by Japan, which imported 3.3 million tons.

BREAK FOR GRAZERS. . .USDA's Forest Service reports there will be no increase in fees this year for cattle, horses, and sheep grazing on National Forest lands in 11 adjoining Western States and on public land administered by the Bureau of Land Management. Fees on National Forests will be held at last year's average of $1.60 per animal unit month. (An animal unit month is the grazing of a mature cow, horse, or five sheep for 1 month.) The new fee year starts March 1, 1977.

Statistical Barometer

Item	1974	1975	1976—latest available data	
Farm Food Market Basket:[1]				
Retail cost (1967=100)	162	175	174	October
Farm value (1967=100)	178	187	169	October
Farmer's share of retail cost (percent)	43	42	38	October
Farm Income:				
Volume of farm marketings (1967=100)	111	115	123	[2]
Cash receipts from farm marketings ($bil.)	92.6	89.6	95.5	[2]
Realized gross farm income ($bil.)	100.2	98.2	104.8	[2]
Production expenses ($bil.)	72.4	75.5	81.2	[2]
Realized net farm income ($bil.)	27.8	22.7	23.6	[2]
Agricultural Trade:				
Agricultural exports ($bil.)	22	22	2.3	October
Agricultural imports ($bil.)	10	10	.8	October
Farm Production and Efficiency:				
Farm output, total (1967=100)	108	111	111	November
Livestock (1967=100)[3]	106	100	103	November
Meat animals (1967=100)	110	101	102	November
Dairy products (1967=100)	98	98	101	November
Poultry and eggs (1967=100)	106	102	109	November
Crops (1967=100)[4]	110	122	118	November
Feed grains (1967=100)	93	113	117	November
Hay and forage (1967=100)	104	108	100	November
Food grains (1967=100)	120	141	138	November
Sugar crops (1967=100)	104	130	130	November
Cotton (1967=100)	158	112	133	November
Tobacco (1967=100)	101	111	105	November
Oil crops (1967=100)	127	151	128	November
Cropland used for crops (1967=100)	106	108	108	November
Crop production per acre (1967=100)	103	113	109	November

[1]Average annual quantities per family and single person households bought by wage and clerical workers, 1960-61, based on Bureau of Labor Statistics figures.
[2]Annual rate, seasonally adjusted, third quarter.
[3]Includes minor livestock products not shown in the separate groups below. Cannot be added to gross crop production to compute farm output.
[4]Includes miscellaneous crops not shown in the separate groups below. Cannot be added to gross livestock production to compute farm output.

Crop Reporting Board

AGRICULTURAL SITUATION

JANUARY-FEBRUARY 1977 ● VOL. 61 NO. 1
DIANE DECKER, EDITOR

The Agricultural Situation, published 11 times a year by USDA's Statistical Reporting Service, is distributed free to crop and livestock reporters in connection with their work. Contents of the magazine may be reprinted without permission. The Secretary of Agriculture has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through January 31, 1979. Subscription price $3.30 a year ($4.15 foreign). Order from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Single copies available from the SRS Information Staff, Rm. 5855-South, USDA, Washington, D.C. 20250.

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